

## **MEASLES, MUMPS, AND RUBELLA**

“...Without an immunization program, an estimated 3,325,000 cases of measles would occur as compared to 2,872 actual cases in 1983 with a program. Instead of an expected 1.5 million rubella cases annually, there were only 3,816 actual cases. Mumps cases were lowered from an expected 2.1 million to 32,850 actual cases. Comparable reductions in disease-associated complications, sequelae, and deaths are gained with an immunization program. Without a vaccination program, disease costs would have been almost \$1.4 billion.” (White, C. C., J. P. Koplan, and W. A. Orenstein. 1985. Benefits, risks, and costs of immunization for measles, mumps, and rubella. *Am J Pub Health* 75:739 -744.)

“...The health and resource benefits due to vaccination against measles during the first 20 years of vaccine licensure were estimated. Vaccination against measles prevented 52 million cases, 5,200 deaths, and 17,400 cases of mental retardation, achieving a net savings of \$5.1 billion.” (Bloch, A. B., W. A. Orenstein, H. C. Stetler et al. 1985. Health impact of measles vaccination in the United States. *Pediatrics*. 76:525 532.)

## **BENEFIT/COST ANALYSIS OF RUBELLA VACCINATION POLICY**

“ ...To analyze rubella vaccination strategies benefits and costs were calculated for the prevention of rubella. With no vaccination, lifetime expenditures for congenital rubella syndrome in offspring of females are greater than \$35 per female. Expenditures for acute rubella are less than \$2.70 per person. Cost, when monovalent vaccine is used, is \$3.00 per person.” (Schoenbaum, S. C., et al. 1976. Benefit-cost analysis of rubella vaccination policy. *New Engl J Med*. 294:306-310.)

## **A BENEFIT/COST ANALYSIS OF MUMPS VACCINE**

“...A mumps vaccination program, in which mumps vaccine was given as part of a measles-mumps-rubella combination, would reduce costs associated with mumps by more than 86%, with a benefit-cost ratio of 7.4:1, using reported incidence rates. The program has a benefit/cost ratio of 39:1 when approximations of actual mumps incidence are used in the analysis. Mumps vaccination is highly cost-beneficial.” (Koplan, J. P., and S. R. Preblud. 1982. A benefit-cost analysis of mumps vaccine. *Amer J Dis Child*. 136:362-364.)